

CLAIMS

What is claimed is:

- 5 1. A display assembly for an electronic device comprising:
- a display mechanism;
- a plurality of pressure activated sensors; and
- a single-piece bezel-less top cover enclosing said display mechanism to
- allow mechanical transfer between said top cover and said plurality of pressure
- 10 activated sensors, wherein said pressure activated sensors can be activated by
- mechanical pressure applied to the external surface of said single-piece cover
- enclosure.
2. The display assembly of Claim 1, wherein said display mechanism
- 15 is disposed beneath said single-piece bezel-less top cover, and above said
- plurality of pressure activated sensors.
3. The display assembly of Claim 1, wherein said display mechanism
- is in direct contact with said plurality of pressure activated sensors.
- 20 4. The display assembly of Claim 1, further comprising a fixed
- electronic circuit layer and wherein said pressure activated sensors are
- disposed between said circuit layer and said display mechanism.

5. The display assembly of Claim 1, wherein said single-piece bezel-less top cover further comprises:

a transparent flexible thermoplastic outer film; and

5 a supporting structure that is co-molded to said transparent flexible thermoplastic outer film.

6. The display assembly of Claim 5, wherein said transparent flexible thermoplastic outer film has sufficient deflection under external pressure to
10 apply mechanical pressure to said display mechanism which applies pressure to said plurality of pressure activated sensors.

7. The display assembly of Claim 5, wherein said plurality of pressure activated sensors are operable to register a position where contact is
15 made with said transparent flexible thermoplastic outer film.

8. The display assembly of Claim 1, wherein said single-piece bezel-less top cover is a flat top surface free of any indentation.

20 9. The display assembly of Claim 1, wherein said plurality of pressure activated sensors comprise an accelerometer operable to identify the parameters of a valid input event.

10. The display assembly of Claim 1, wherein said single-piece bezel-less top cover is a transparent rigid cover.

11. The display assembly of Claim 10, further comprising a back cover
5 and wherein said single-piece bezel-less top cover is disposed around said display mechanism to contact said plurality of pressure activated sensors, which are disposed between said top cover and said back cover.

12. The display assembly of Claim 11, wherein said single-piece
10 bezel-less top cover has sufficient range of motion to allow mechanical transfer between said top cover and said plurality of pressure activated sensors.

13. The display assembly of Claim 11, wherein said plurality of
15 pressure activated sensors are operable to register a position where contact is made with said single-piece bezel-less top cover.

14. The display assembly of Claim 11, wherein said single-piece bezel-less top cover is a flat top surface free of any indentation.

20 15. The display assembly of Claim 11, wherein said single-piece bezel-less top cover has indentations to indicate button functions.

16. A display assembly for an electronic device comprising:

a display mechanism of flat panel display technology;

a transparent single-piece cover that is bezel-less and is disposed over a top surface of said display mechanism and operable to allow mechanical transfer of pressure to said display mechanism; and

5 a plurality of pressure activated sensors disposed under said display mechanism and, responsive to said mechanical transfer of said display mechanism, operable for registering a contact point on said transparent single-piece cover.

10 17. The display assembly of Claim 16, further comprising a supporting structure and wherein said transparent single-piece cover is a flexible thermoplastic outer film co-molded to said supporting structure.

15 18. The transparent single-piece cover of Claim 17, wherein said flexible thermoplastic outer film has sufficient deflection under external pressure to transfer said pressure to said display mechanism.

19. The display assembly of Claim 16, wherein said single-piece cover is a flat surface free of any indentations.

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20. The display assembly of Claim 16, wherein said plurality of pressure activated sensors comprise an accelerometer operable to perform thresholding to identify a valid input event.

21. The display assembly of Claim 16, wherein an in-mold decoration is located under said transparent single-piece bezel-less cover and above said flat panel display.

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22. A display assembly for an electronic device comprising:
a display mechanism of flat panel display technology;
a back cover;
a transparent single-piece cover that is bezel-less and disposed over a
10 top surface of said display mechanism; and
a plurality of pressure activated sensors disposed between said
transparent single-piece cover and said back cover and, responsive to pressure
asserted on said transparent single-piece cover, operable for registering a
contact point on said transparent single-piece cover.

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23. The display assembly of Claim 22, wherein said plurality of pressure activated sensors comprise an accelerometer operable to identify a valid input event.

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24. The display assembly of Claim 23, wherein said single-piece cover is a flat surface free of any indentations.

25. The display assembly of Claim 22, wherein an in-mold decoration is located under said transparent single-piece bezel-less cover and above said flat panel display.

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